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PATENT
CUSTOMER NUMBER, 34,986
Docket No. 01064.0011-08-000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Richard LEVY

Serial No.: 10/814,114

Filed: July 7, 2003

For: SUPERABSORBENT POLYMER
COMPOSITIONS ON A
SUBSTRATE (AS AMENDED)

Group Art Unit: 1774

Examiner: Jill Gray

Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

APPELLANT'S BRIEF ON APPEAL PURSUANT TO 37 C.F.R. § 41.37

The examiner, rather than submitting an Examiner's Answer in response to appellant's February 2, 2006 appeal brief, reopened prosecution of this application with a second non-final rejection of April 19, 2006. Appellant responded by filing a second Notice of Appeal on April 28, 2006 and a second Brief on Appeal on June 6, 2006. Again, rather than submitting an Examiner's Answer, the examiner reopened prosecution with a third non-final Office Action dated August 29, 2006. Appellant responded to the third non-final rejection by filing a third notice of appeal on November 29, 2006, and now submits this third brief to perfect that appeal. This brief sets forth the authorities and arguments on which appellant will rely to maintain the appeal.

The Code of Federal Regulations, 37 C.F.R. § 41.20 (b) (2), requires payment of a \$250.00 fee for filing this brief; however, appellant filed the appeal brief of February 2, 2006 with

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an appeal fee of \$250.00. The Manual of Patent Examining Procedure § 1204.01 waives payment of the \$250.00 fee in these circumstances.

(i) Real party in interest

The inventor assigned the parent application Serial No. 08/487,436, filed June 7, 1995 to Lee County Mosquito Control District. The assignment was recorded at reel 7878, frame 0620 on August 23, 1995, which makes Lee County Mosquito Control District the real party in interest.

(ii) Related appeals and interferences

Appellant has co-pending appeals before the Board of Patent Appeals and Interferences in the following related applications:

Serial No. 08/943,125 October 3, 1997 (Attorney Docket 01064.0011-02-0000)

Serial No. 09/359,809 Filed July 23, 1999 (Attorney Docket 01064.0011-05-0000)

The Board of Patent Appeals and Interferences rendered a decision in an appeal on application Serial No. 08/943,125 Filed October 3, 1997 on February 27, 2006, reversing the examiner in all respects. Rather than issuing a Notice of Allowance, the examiner rejected the application

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again, and appellant has appealed that rejection as well. The Patent Office, however, labeled the file jacket of application Serial No. 08/943,125 as follows:

U. S. PATENT AND TRADEMARK OFFICE

RETURN TO (PTO 1056)

INTERFERENCE SERVICE BRANCH

This case is involved in an

Interference Proceeding

Appellant includes in section "(ix) Related proceedings appendix" of this brief the Board's February 27, 2006 decision in application Serial No. 08/943,125 and in "(ix) Evidence appendix" a certified copy of the file jacket of that application showing the foregoing label regarding the interference. Appellant also included that label as an attachment to appellant's brief in Serial No. 08/943,125.

The Patent Office has not notified appellant that they have declared an interference in any of the foregoing applications, even though they indicated on the file of application Serial No. 08/943,125 "[t]his case is involved in an Interference Proceeding." The Board also took the position, when contacted by appellant's attorneys by telephone, that the Patent Office had not declared an interference, in application Serial No. 08/943,125. Lastly, the Board's decision in the pending appeals could directly affect, or be directly affected by, or have a bearing on the decision in the co-pending appeals.

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(iii) **Status of Claims**

The application contains claims 57-63, 65-71, 73, 76, and 87-91.

(iv) **Status of Amendments**

The examiner has entered and considered all amendments filed in this application.

(v) **Summary of Claimed Subject Matter**

The invention of independent claim 57 comprises a substrate coated with a substantially water free composition (written description, page 20, paragraph bridging pages 31-32) comprising a superabsorbent polymer that absorbs greater than about 100 times its weight in water (written description, paragraph bridging pages 22-23) with a material for decreasing friction between moving surfaces. This material comprises a lubricating metal, and alloy thereof, lubricating metal chalcogenide, halide, carbonate, silicate, phosphate, or a particulate lubricating metal nitride, carbon lubricant, silicate ester, polyphenyl ether, organic phosphate; biphenyl, phenanthrene or phthalocyanine compound. It may optionally contain a lubricant comprising an organic lubricant, inorganic lubricant or a lubricant additive, or mixtures thereof. The written description supports the organic lubricants at pages 6-14 and the paragraph bridging pages 25-26, whereas pages 15-18 support inorganic lubricants, additives at page 25, first full paragraph, lubricant additives specifically at pages 7-10, and mixtures at page 26, second full paragraph inter alia. In addition, original claims 6, 10, and 14 also support the amendments to the claims that describe the material for lubricating a surface.

Independent method claim 65 describes the use of the foregoing composition to protect a substrate from the affects of water. Page 39 of the written description, last sentence,

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describes the composition as useful for protecting substrates from the "affects of water or water migration."

(vi) **Grounds of Rejection to be Reviewed on Appeal**

- a. Whether claims 57, 65, 73, 76 and 91 fail to comply with the requirement under 35 U.S.C. § 112, second paragraph that the claims particularly point out and distinctly claim the subject matter which appellant regards as his invention, i.e., the claims do not clearly state the nature of the lubricating materials.
- b. Whether claim 91 is indefinite under 35 U.S.C. § 112, second paragraph for the reasons stated in subparagraph "a." immediately above and whether the claim uses incomplete statements to describe the lubricating materials, the surface, and the structural relationship of the elements of the claims.
- c. Whether claims 73 and 76 are vague and indefinite under 35 U.S.C. § 112, second paragraph for use of the term "about."
- d. Whether Freeman, United States Patent No. 5,218,011 ("Freeman") anticipates claims 57-63, 65-71, 73, 76, and 87-90 under 35 U.S.C. § 102 (b).

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e. Whether claims 57-63, 65-71, 73, 76, and 87-91 are obvious under 35 U.S.C. § 103 (a) and therefore unpatentable in view Petinelli et al. United States Patent No. 4,621,169 ("Petinelli") in view of Freeman, and Marciano-Agostinelli et al., United States Patent No. 5,049,593 (Marciano-Agostinelli).

(vii) Argument

The Rejection of Claims 57, 65, 73, 76, and 91 Under 35 U.S.C. § 112 Second Paragraph

The examiner rejects claims 57, 65, 73, 76, and 91 under 35 U.S.C. § 112 second paragraph requiring that the claims particularly point out and distinctly claim the subject matter which appellant regards as his invention, i.e., the claims do not clearly state the nature of the lubricating materials.

The examiner focuses on claims 57 and 65 in the first instances. She argues these claims do not make clear which one or combination of the three categories of materials recited

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(i.e., those of subparagraphs (1), (2), or (3)) they cover. Appellant reproduces those claims as follows in order to assist in the analysis:

57: A substrate coated with an essentially water-free composition, wherein said composition comprises a superabsorbent polymer that absorbs greater than 100 times its weight in water in combination with a material for lubricating a surface wherein said material for lubricating a surface comprises:

(1) a lubricating metal and alloy thereof, lubricating metal chalcogenide, halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant; or

(2) a silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound;

(3) said material for lubricating a surface optionally containing a lubricant comprising an organic lubricant, inorganic lubricant, or a lubricant additive;

(4) or mixtures thereof.

65: A method of protecting a substrate from the affects of

water or water migration comprising coating said substrate with an essentially water-free composition, wherein said composition comprises a superabsorbent polymer that absorbs greater than 100 times its weight in water in combination with a material for lubricating a surface wherein said material for lubricating a surface comprises:

(1) a lubricating metal and alloy thereof, lubricating metal chalcogenide, halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant; or

(2) a silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound;

(3) said material for lubricating a surface optionally containing a lubricant comprising an organic lubricant, inorganic lubricant, or a lubricant additive;

(4) or mixtures thereof.

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Subparagraph (4) of both claims clearly include any combination of lubricants in subparagraph (1) or any combination of lubricants in subparagraph (2) and any lubricant or combination of lubricants of subparagraph (1) with any lubricant or combination of lubricants of subparagraph (2). All of the foregoing lubricants, singly or in combination as noted may also include an "optional" component of the materials or combination of materials recited in subparagraph (3).

The examiner also challenges the description of the lubricating metal compounds of subparagraph (1) of claims 57 and 65. This subparagraph in both claims clearly defines the lubricant as compounds comprising a lubricating metal chalcogenide, lubricating metal halide, lubricating metal carbonate, lubricating metal silicate, and lubricating metal phosphate. The punctuation of subparagraph (1) clearly shows this, especially the absence of a comma before the term "or" in the recitation of the various lubricating metal compounds, and by use of a comma to set out the next category of lubricants comprising a particulate lubricating metal nitride or a carbon lubricant.

The examiner also challenges the term "phosphate" in subparagraph (1), arguing it covers the "organic phosphate" of subparagraph (2). As pointed out above, the "phosphate" of subparagraph (1) comprises a "lubricating metal phosphate" and not an "organic phosphate" recited in subparagraph (2). The examiner also rejects claim 91 arguing that "lubricating metal, and alloy thereof, lubricating metal chalcogenide, halide carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a lubricant" of subparagraph (1) is an incomplete

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statement as is the language of line 4, i.e., "surface comprises." Appellant reproduces claim 91 as follows to assist in analyzing the claim:

91: The substrate of one of claims 57 or 65 wherein said:

(1) lubricating metal and alloy thereof, lubricating metal chalcogenide halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant comprises;

molybdenum disulfide, cobalt chloride, antimony oxide, niobium selenide, tungsten disulfide, boron nitride, silver sulfate, cadmium chloride, cadmium iodide, cadmium oxide, borax, basic white lead, lead carbonate, lead monoxide, lead iodide, asbestos, talc, mica, zinc oxide, zinc phosphate, iron phosphate, manganese phosphate, carbon, graphite, babbitt, bronze, brass, aluminum, gallium, indium, thallium, thorium, copper, silver, gold, mercury, lead, tin, indium, or the Group VIII noble metals or mixtures thereof.

As can be seen, subparagraph (1) describes a genus of lubricants as the subject followed by the verb "comprises," and continues with a recitation of species of lubricants as the object. The claim contains a subject, verb, and object, which makes it a complete sentence, contrary to the position taken by the examiner. Lastly, line 4 of claim 91 does not include the phrase "surface comprises" as the examiner contends.

In claiming the particle size of the superabsorbent resin used in the invention, appellant employs the term "about" to define the physical parameters of the particles. The examiner contends "'about' means that exactitude is not being claimed and would include values greater than and less than" the 0.5 micron lower limit of the particle size recited in the claims. (August 29, 2006 Office Action, p.4, 2nd full par.) The examiner also argues that the phrase "about less than" includes "zero."

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The Patent and Trademark Board of Appeals has upheld the use of the term "about," noting that it is not indefinite inasmuch as its meaning is not broad and arbitrary, but rather the term is clear and flexible, and means "approximately," or "nearly." Ex parte Eastwood et al., 163 USPQ 316 (Bd. of App., 1968). Claims are not indefinite even though "about" or "approximately" are used in the sense that a few degrees more or less than stated is not significant. Ex parte Shelton, 91 USPQ 374 (Bd. of App. 1951). Lastly, The Court of Appeals for the Federal Circuit considered the term "exceeding about 10 % per second" definite because infringement could be clearly assessed by the use of a stopwatch. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F. 2d 1540, 220 USPQ 303 (Fed. Cir. 1983). Here, particle size can be clearly assessed using a microscope or standard sieves.

A person with ordinary skill in the art would not consider the lower limit of the particle measurements of appellant's claimed superabsorbent polymer as "zero," since this would amount to a negation of the superabsorbent polymer as a particulate material. i.e., this interpretation construes the particle in one instance as having no physical dimensions at all and therefore nonexistent, which the skilled artisan would not do.

The Rejections Under 35 U.S.C. §§ 102 (b) and 103 (a)

The examiner rejects claims 57-63, 65-71, 73, 76, and 87-90 under 35 U.S.C. § 102 (b) as unpatentable over Freeman and claims 57-63, 65-71, 73, 76, and 87-91 under 35 U.S.C. § 103 (a) as unpatentable over Petinelli, Freeman, and Marciano-Agostinelli.

The 35 U.S.C. § 102 (b) Rejection Based on Freeman

Freeman, although describing superabsorbent polymers for coatings at column 7, lines

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21 et seq., lines 29 et seq. and Lines 17 et seq. does not disclose the water absorbency of the polymer he employs. Appellant's polymer has to absorb at least 100 times its weight in water, but Freeman does not teach this water absorbency. Freeman's water absorbency could be only about 40 or 50, but the skilled artisan can make no determination of what the patentee required by way of water absorbency since the reference doesn't say anything in this regard. Freeman also does not show the particle size of appellant's superabsorbent polymer.

Additionally, Freeman does not teach or suggest appellant's organic or inorganic lubricants, but rather the following organic compounds at column 7, lines 20 et seq.:

silicones,
petroleum oils,
high viscosity esters,
polyglycols,
olefins,
fluorocarbons,
mixtures of;
polyalkylene glycols,
poly alpha-olefins,
polyisobutylene; and
mineral oils.

Appellant, however, claims organic lubricants comprising a polyphenyl ether, biphenyl, phenanthrene or phthalocyanine compound which Freeman does not teach or suggest. Appellant also claims inorganic lubricants, and none of the materials listed above from Freeman comprise the inorganic lubricants claimed according to the present invention.

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The Rejection under 35 U.S.C. § 103 (a) Based on Petinelli,

Freeman and Marciano-Agostinelli

The examiner, citing Petinelli takes the position the reference discloses a cable and wire substrate coated with an essentially water-free composition that also includes a metal or metal oxide or carbon, as well as the organic lubricant claimed by appellant. She relies on Petinelli to show some of the inorganic materials appellant claims. She also acknowledges Petinelli does not teach superabsorbent polymers, but cites Freeman to show these materials.

Freeman, according to the examiner, provides the motivation for combining its teachings with Petinelli since it discloses a water-free gel composition for protecting a wire or cable substrate from damage caused by water, where the gel composition contains superabsorbent polymers combined with silicones, petroleum gels, esters, glycols, olefins, mineral oils and fluorocarbons.

The examiner also cites Marciano-Agostinelli to address the superabsorbent polymer water absorbing properties of the composition of the invention, as well as the polymer particle size parameters of claims 73, 76, and claims dependent thereon, acknowledging Freeman does not describe these parameters.

The Examiner "has to point to some teaching, [or] suggestion. . . in the prior art to select and combine the references that . . . [she] relied on to show obviousness." In re Lee, 227 F.3d 1338, 61 U.S.P.Q. 1430, 34 (Fed. Cir., 2002) (emphasis added). "When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to select and combine the references relied on as evidence of obviousness... 'the central question is whether there is a reason to combine references.'" Lee, 61 U.S.P.Q. at

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1435 (emphasis added) (citation omitted). In re Kahn, No. 04-1616, Fed. Cir. March 22, 2006. The references also have to provide some motivation for the skilled artisan to combine their teachings. Id.

The combination of references does not make appellant's invention obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01 citing In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2nd 1430 (Fed. Cir. 1990). In addition, there must be some reasonable expectation of success (M.P.E.P. § 2143.02, citing In re Merck & Co., Inc. 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986)) and that some advantage or expected beneficial result would have been produced by their combination. (M.P.E.P. § 2144 citing In re Semaker, 702 F.2d 989, 994-95, 217 U.S.P.Q. 1, 5-6 (Fed. Cir. 1983)). Lastly, the prior art references must teach or suggest all of appellant's claim limitations. (M.P.E.P. §§ 2143 and 2143.03, and In re Royka, 490 F. 2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) cited in M.P.E.P. §2143.03.)

Appellant submits that the Examiner has not pointed to anything in the cited references that would lead a person with ordinary skill in the art to combine their teachings.

Analysis

Appellant does not dispute that both Petinelli and Freeman disclose cable or wire coatings, but the similarity stops there. The references provide no motivation, suggestion or teaching for combining them under 35 U.S.C. § 103 (a) for the purpose of an obviousness rejection. In fact, the references taken together would lead a person of ordinary skill in the art away from appellant's invention. The examiner, however, has combined their teachings in an attempt to include the inorganic materials of Petinelli with the superabsorbent polymer of

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Freeman.

Petinelli in this regard, although teaching a coating for a cable, describes some of the difficulties in protecting the cable from water. The inventor notes:

[t]he region between the semiconducting polymer. . . and the metallic shield. . . is always apt to allow traces of moisture to come into contact with the metal, thus causing the latter to deteriorate by a process of disintegration, oxidation and/or corrosion. This drawback can be partially limited by incorporating between the metallic sheath and the semiconducting polymer, a layer of a hydrophilic material such as carboxymethylcellulose or of a hygroscopic material such as a semiconducting clay whose swelling in the presence of moisture will prevent the water from spreading along the conducting metal. However, these products will not prevent local corrosion of the shields. . .

[T]he invention [therefore] has as its object an electric cable construction of the type comprising at least one metallic shield and at least one semiconducting polymer layer which surround at least one cable conductor, characterized in that between said metallic shield and said semiconducting polymer layer there is interposed a moistureproofing [sic] layer comprising a semiconducting and hydrophobic gel.

(Petinelli, par. bridging cols. 1 and 2, Col. 2. lines 13-21) (Emphasis added).

In sum, Petinelli states he avoids corrosion caused by prior art "hydrophilic material" or "hygroscopic material" by employing a composition having just the opposite properties, i. e., a "hydrophobic gel." But the superabsorbent polymers of Freeman that the examiner would have the skilled artisan use in lieu of the "hydrophobic gel" of Petinelli absorb water! ¹ They are diametrically opposed. Why on the one hand would the skilled artisan avoid water absorption and water corrosion with the "hydrophobic gel" of Petinelli, just to eliminate that advantage by substituting the water absorbing polymer of Freeman for it? She or he would not because the

Freeman, Col. 5, line 57 through Col. 6 line 34.

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combined teachings of Petinelli and Freeman lead away from making this substitution.

The examiner cannot reject the claims on grounds of obviousness by combining the inorganic pigments of Petinelli's hydrophobic cable coating composition with the superabsorbent polymer of Freeman's hydrophilic cable coating composition to show appellant's invention, i. e., inorganic lubricants combined with superabsorbent polymers. The hydrophobic properties of Petinelli are diametrically opposed to the hydrophilic properties of Freeman, and when viewed in the context of these limitations they fail to provide any motivation, teaching, or suggestion to combine the teachings in a way leading to appellant's invention. On the contrary, they teach away from the invention.

Appellant previously distinguished Freeman on the grounds that the reference does not disclose the water absorbency of the polymer Freeman employs. Appellant's polymer has to absorb at least 100 times its weight in water, but Freeman does not teach this water absorbency. Freeman's water absorbency could be only about 40 or 50, but the skilled artisan can make no determination of what the patentee required by way of water absorbency since the reference doesn't say anything in this regard. Freeman also does not show the particle size of appellant's superabsorbent polymer. The examiner therefore turns to Marciano-Agostinelli in an attempt to find these parameters.

The examiner cannot pluck appellant's water absorbency or the particle size of appellant's superabsorbent polymer out of Marciano-Agostinelli since, as appellant will show, Marciano-Agostinelli does not contain the requisite teaching or suggestion to combine its teachings with Freeman.

Marciano-Agostinelli describes a composition consisting of a mixture (column 3, lines 34

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et seq.) of a superabsorbent polymer (column 5, lines 26 et seq.) and a "rubber" (column 5, lines 3 et seq.). Appellant does not employ "rubber" as a lubricant, and importantly none of the references relied on by the examiner teach or suggest that "rubber" comprises a material for lubricating a surface. To combine Freeman with Marciano-Agostinelli therefore would result in a composition containing some of the organic materials of Freeman (e.g., a silicone, a petroleum oil etc.), a superabsorbent polymer, also from Freeman, and a superabsorbent polymer and rubber from Marciano-Agostinelli. If the examiner makes the combination, she has to take the rubber of Marciano-Agostinelli as well, and appellant does not use rubber as a lubricant. Therefore, Marciano-Agostinelli standing alone, or in combination with Freeman does not make appellant's invention obvious.

The prior art does not provide a teaching, suggestion or motivation to use the "rubber" of Marciano-Agostinelli in a lubricating material and contains no evidence relevant to selecting and combining the references, especially where common experience teaches rubber has just the opposite properties of a lubricant, i. e., there is no reason to combine the references because the examiner has not shown that "rubber" acts as a lubricant; the prior art does not show or suggest the desirability of the combination or reasonable expectation of success when using "rubber" in a composition for lubricating a surface; and that some advantage or expected beneficial result would have been produced by using "rubber" in a composition for lubricating a surface.

Freeman, Petinelli and Marciano-Agostinelli, either taken alone or in combination with one another neither provide the motivation to make nor teaching or suggestion of appellant's

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invention comprising a substrate coated with appellant's composition, and a method for protecting a substrate from the affects of water or water migration with the composition.

In view of the foregoing reasons, appellant requests the Board to reverse the examiner in all respects and remand the application to the examiner for the issuance of a Notice of Allowance.

Respectfully submitted,

THE LAW OFFICES OF ROBERT J. EICHELBURG

Dated: January 10, 2007

By: /Robert J. Eichelburg, Reg. No 23,057/
Robert J. Eichelburg

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(viii) Claims appendix

Claims 1-56 (canceled without prejudice or disclaimer).

57: A substrate coated with an essentially water-free composition, wherein said composition comprises a superabsorbent polymer that absorbs greater than 100 times its weight in water in combination with a material for lubricating a surface wherein said material for lubricating a surface comprises:

(1) a lubricating metal and alloy thereof, lubricating metal chalcogenide, halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant; or

(2) a silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound;

(3) said material for lubricating a surface optionally containing a lubricant comprising an organic lubricant, inorganic lubricant, or a lubricant additive;

(4) or mixtures thereof.

58: The substrate of claim 57 wherein said organic lubricant comprises a petroleum lubricant, synthetic lubricant, grease, or solid lubricant, or combinations thereof and wherein said additive comprises a detergent or a dispersant.

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59: The substrate of claim 57 wherein said superabsorbent polymer is neutralized or cross-linked, and is based on acrylic acid, acrylamide, or an acrylate.

60: The substrate of claim 58 wherein said superabsorbent polymer is neutralized or cross-linked, and is based on acrylic acid, acrylamide, or an acrylate.

61: The substrate of claim 57 wherein said organic lubricant comprises a petroleum oil, an organic ester, a silicone, or a glycol, or combinations thereof.

62: The substrate of claim 57 wherein said substrate comprises a cable.

63: The substrate of claim 57 wherein said substrate comprises a wire.

64 (canceled without prejudice or disclaimer).

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65: A method of protecting a substrate from the affects of water or water migration comprising coating said substrate with an essentially water-free composition, wherein said composition comprises a superabsorbent polymer that absorbs greater than 100 times its weight in water in combination with a material for lubricating a surface wherein said material for lubricating a surface comprises:

(1) a lubricating metal and alloy thereof, lubricating metal chalcogenide, halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant; or

(2) a silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound;

(3) said material for lubricating a surface optionally containing a lubricant comprising an organic lubricant, inorganic lubricant, or a lubricant additive;

(4) or mixtures thereof.

66: The method of claim 65 wherein said organic lubricant comprises a petroleum lubricant, synthetic lubricant, grease, or solid lubricant, or combinations thereof, and said additive comprises a detergent or a dispersant.

67: The method of claim 65 wherein said superabsorbent polymer is neutralized or cross-linked, and is based on acrylic acid, acrylamide, or an acrylate.

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68: The method of claim 66 wherein said superabsorbent polymer is neutralized or cross-linked, and is based on acrylic acid, acrylamide, or an acrylate.

69: The method of claim 65 wherein said organic lubricant comprises a petroleum oil, an organic ester, a silicone, or a glycol, and combinations thereof.

70: The method of claim 65 wherein said substrate comprises a cable.

71: The method of claim 65 wherein said substrate comprises a wire.

72 (canceled without prejudice or disclaimer).

73: The substrate of claim 57 wherein the particle size of the superabsorbent polymer comprises from about less than 0.5 microns to about 300 microns.

Claims 74-75 (canceled without prejudice or disclaimer).

76: The method of claim 65 wherein the particle size of the superabsorbent polymer comprises from about less than 0.5 microns to about 300 microns.

Claims 77-86 (canceled without prejudice or disclaimer).

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87: The substrate of any one of claims 57-63 and 73 wherein said composition is a product produced by the process of combining said superabsorbent polymer with said material for lubricating a surface.

88: The method of any one of claims 65-71 and 76 wherein said composition is a product produced by the process of combining said superabsorbent polymer with said material for lubricating a surface.

89: The substrate of one of claims 57-63 and 73 wherein said composition protects said substrate from the affects of water or water migration.

90: The substrate of claim 87 wherein said composition protects said substrate from the affects of water or water migration.

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91: The substrate of one of claims 57 or 65 wherein said :

(1) lubricating metal and alloy thereof, lubricating metal chalcogenide halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant comprises;

molybdenum disulfide, cobalt chloride, antimony oxide, niobium selenide, tungsten disulfide, boron nitride, silver sulfate, cadmium chloride, cadmium iodide, cadmium oxide, borax, basic white lead, lead carbonate, lead monoxide, lead iodide, asbestos, talc, mica, zinc oxide, zinc phosphate, iron phosphate, manganese phosphate, carbon, graphite, babbitt, bronze, brass, aluminum, gallium, indium, thallium, thorium, copper, silver, gold, mercury, lead, tin, indium, or the Group VIII noble metals or mixtures thereof.

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(ix) Evidence appendix

Appellant did not present any evidence to the examiner in the prosecution of this application, but at this time attaches the August 12, 2002 certified copy of the first two pages of the Patent Office file jacket of application Serial No. 08/943,125 with a label stating that the Patent Office placed that application into an interference. The label on the certified copy of the file jacket of application Serial No. 08/943,125 notes as follows:

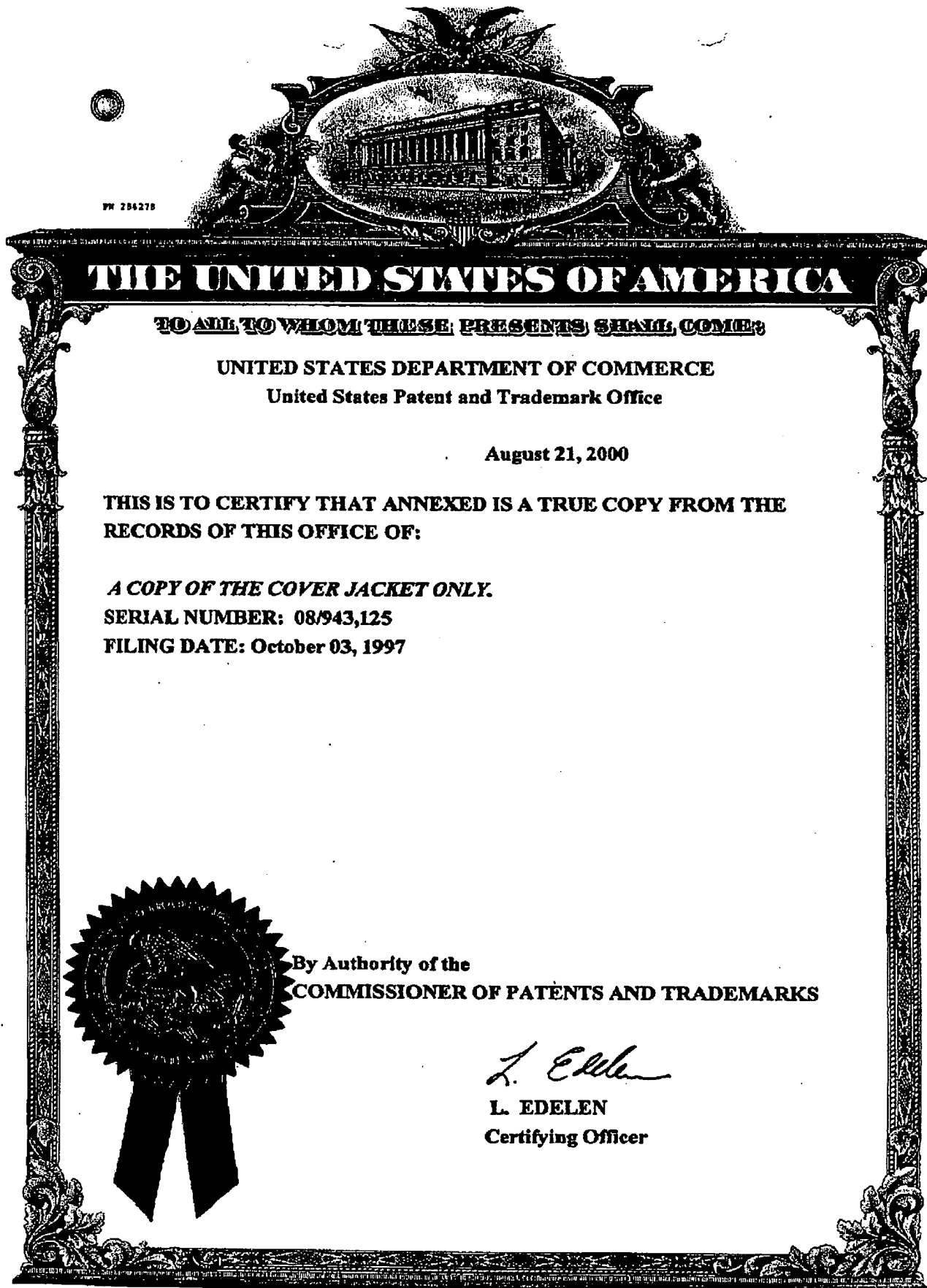
U. S. PATENT AND TRADEMARK OFFICE

RETURN TO (PTO 1056)

INTERFERENCE SERVICE BRANCH

This case is involved in an

Interference Proceeding



18/25
10/03/97
CLASS
SUBCLAS

RETURN
MRS COOK

UTILITY
SERIAL
NUMBER

PATENT
DATE

PATENT
NUMBER

SERIAL NUMBER 08/903,125 FILING DATE 10/03/97 CLASS 508 SUBCLASS 009 110 GROUP ART UNIT 1721 EXAMINER medley

APPLICANTS RICHARD LEVY, M.D.S., PLL

CONTINUING DATA*****
VERIFIED THIS APPLN IS A CON OF 08/487,436 02/07/95
M.B.M.

FOREIGN PCT APP. LOCATION*****
VERIFIED
M.B.M.

CPA

FOREIGN FILING LICENSE GRANTED 11/12/97

Foreign priority claimed 35 USC 118 conditions met ☒ yes ☐ no
Verified and Acknowledged ☒ yes ☐ no
Examiner's Initials

AS FILED

STATE OR COUNTRY FL

SHEETS DRWGS. 0

TOTAL CLAIMS 13

INDER. CLAIMS

FILING FEE RECEIVED

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TITLE LUBRICANT COMPOSITIONS AND METHODS

U.S. DEPT. OF COMM./PAT. & TM—PTO-436L (Rev.12-94)

PARTS OF APPLICATION FILED SEPARATELY

NOTICE OF ALLOWANCE MAILED

Amount Due Date Paid

Label

CLAIMS ALLOWED

Assistant Examiner

ISSUE FEE

Primary Examiner

PREPARED FOR ISSUE

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Application No. 10/614,114
Brief on Appeal
Dated: January 10, 2007

(x) Related proceedings appendix

Appellant attaches a copy of the Board's February 27, 2006 decision in application Serial No. 08/943,125 and a certified copy of the file jacket of application Serial No. 08/943,125 showing the Patent and Trademark Office labeled it as an application involved in an interference. Appellant submitted a copy of the file jacket of application Serial No. 08/943,125 to the Board in that appeal.

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

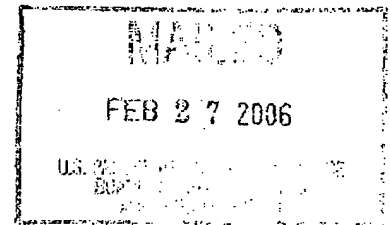
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD LEVY

Appeal No. 2005-2667
Application 08/943,125

ON BRIEF:



Before PAK, WARREN and KRATZ, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

ORDER VACATING ORAL HEARING

On January 25, 2006, Mr. Craig R. Feinberg, a Program and Resources Administrator of the Board of Patent Appeals and Interferences, informed appellant's counsel, Mr. Robert J. Eichelburg, that the Merits Panel assigned to this application had decided to reverse the decision of the examiner. Mr. Feinberg further informed Mr. Eichelburg that therefore, the Oral Hearing scheduled for January 25, 2006, will be vacated.

Accordingly, as counsel was informed on January 25, 2006, it is ORDERED that the Oral Hearing scheduled for 1:00 PM on January 25, 2006, is *VACATED*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, and based on our review, find that we cannot sustain the rejection of appealed claims 43, 44, 49, 50, 55 and 56 under 35 U.S.C. § 102(b) as being anticipated by the Geursen et al. (Geursen) references

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United States Patent 5,534,304 ('304 reference) and WO 93/18223 ('223 reference)¹, which are in the same patent family (answer, pages 3-5 and 6-7).^{2,3}

We refer to the answer and to the brief and reply brief for a complete exposition of the positions advanced by the examiner and appellant.

It is well settled that the examiner has the burden of making out a *prima facie* case of anticipation in the first instance by pointing out where each and every element of the claimed invention, arranged as required by the claim, is described identically in a single reference, either expressly or under the principles of inherency, in a manner sufficient to have placed a person of ordinary skill in the art in possession thereof. See *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990). Whether the teachings and inferences that one skilled in this art would have found in the disclosure of an applied reference would have placed this person in possession of the claimed invention, taking into account this person's own knowledge of the particular art, is a question of fact. See generally, *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), and cases cited therein (a reference anticipates the claimed method if the step that is not disclosed therein "is within the knowledge of the skilled artisan."); *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968) ("[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom."). While it is entirely appropriate to rely on another reference to clarify a fact in the anticipating reference, see generally, *In re Samour*, 571 F.2d 559, 562, 197 USPQ 1, 4 (CCPA 1978), the supporting reference must in fact accomplish that purpose.

The principal issue in this ground of rejection is whether the lubricating compositions

¹ The answer incorrectly identifies the '223 reference as "WO 93/18233."

² The examiner withdrew the ground of rejection of appealed claims 45 through 48, 51 through 54, 57 and 58 under 35 U.S.C. § 103(a) as being unpatentable over the Geursen et al. references further in view of the admitted prior art and Sayad et al., set forth in the Office action mailed May 24, 2002 (pages 5-7) and maintained in the Office action mailed December 18, 2003. The examiner objected to these claims as containing allowable subject matter but dependent on a rejected base claim (answer, page 2). We consider the ground of rejection under the judicially created doctrine of obviousness type double patenting below.

³ Claims 43 through 48 are all of the claims in the application. See page 2 and the appendix of the brief filed March 13, 2003, which we consider on appeal.

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containing any "superabsorbent polymer which absorbs greater than about 100 times its weight in water" in the claimed method of lubricating a surface, encompassed claim 43, and the lubricating compositions containing any "superabsorbent polymer which absorbs greater than about 100 times its weight in water and is a polymer of acrylic acid, an acrylic ester, acrylonitrile, acrylamide, co-polymers thereof or mixtures thereof" in the claimed method of lubricating a surface, encompassed in the remainder of the rejected claims, would have been described to one skilled in this art within the meaning of § 102(b) by the Geursen references.

The examiner takes the position that the Geursen references teach compositions which contain "a superabsorbent material" that is disclosed to be "capable of absorbing and holding a comparatively large quantity of water" which can be made from absorbent derivatives of polyacrylic acid including homo- and copolymers derived from acrylic acid and acrylamide (answer, page 3) ('223 reference, page 6, ll. 5-32; '304 reference, col. 3, ll. 33-67). In the statement of the ground of rejection, the examiner does not identify any specific polymer disclosed *per se* in the Geursen references as meeting the subject claim limitations, but contends that

Geursen incorporates the teachings of Arroyo et al (Arroyo) EP 0,351,100^[4,5] that the [superabsorbent material] includes the ARIDALLTM polymers that are known to absorb greater than 100 times its weight in water. Appellant makes admission on record at page 21 to the bridging paragraph of pages 22-23 of the instant specification that conventional known [superabsorbent material] that absorbs greater than 100 times its weight in water of the Admitted Prior Art are the [superabsorbent material] used in the instant claims. Appellant makes admission on record at line 17 of [page 22] of the instant specification that the ARIDALLTM POLYMERS of the Admitted Prior Art of Arroyo is the [superabsorbent material] used in the instant claims. [Answer, page 4.]

Contrary to appellant's contentions (brief, page 14; reply brief, page 2), the Geursen references teach that insoluble superabsorbent materials that can be used include those "mentioned in . . . [Arroyo]" which are described as "derived from an aqueous solution comprising an acrylate polymeric material which combines acrylic acid and sodium acrylate

⁴ European Patent Application published January 17, 1990.

⁵ We cannot find Arroyo in a PTO-892, a PTO-1449 or elsewhere in the official electronic file of the USPTO for this application. Thus, if the examiner cannot locate evidence in the official electronic file of the USPTO for this application that Arroyo was made of record, the examiner should make it of record.

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functionalities and water" ('223 reference, page 2, ll. 10-17, and page 6, ll. 9-11; '304 reference, col. 1, ll. 45-53, and col. 3, ll. 37-40). We find that Arroyo describes superabsorbent materials generally, including those based on polyacrylic acid and polyacrylonitrile, and discloses that "[t]he preferred superabsorbent material is Aridall™ 1125F Superabsorbent Polymer available from the Chemdal Corporation," and that "Aridall polymers are crosslinked acrylic polymers" (col. 5, l. 35, to col. 7, l. 1).

Appellant discloses in the written description in the specification that "[t]he superabsorbent polymer employed according to the invention, absorbs from about 25 to greater than 100 times its weight in water and comprises a polymer of acrylic acid, an acrylic ester, acrylonitrile or acrylamide, including co-polymers thereof or starch graft copolymers thereof or mixtures thereof, where the mixtures contain from 2 to about 3 or 4 superabsorbent polymers" (page 21, ll. 1-7). Appellant further discloses that the superabsorbent polymers include those listed in certain United States Patents as well as certain commercially available polymers (pages 21-23). Included among the latter is "Aridall™ which are sodium or potassium polyacrylates that may be lightly cross-linked" (page 22, ll. 17-18).

Appellant argues in the brief that the "swelling value" disclosed in Geursen references includes "the relative water absorbency of the yarn or the yarn coated with the superabsorbent polymer composition," and provides a supporting explanation based on the disclosure in Example I, including Table A, of the references for the contention that the same would not have disclosed "superabsorbent polymers that can absorb greater than about 100 times their weight in water" (brief, pages 6-10 and 12; *see* reply brief, page 6). The composition includes "Mirox W 45985" which is a superabsorbent polymer that "is a terpolymer of acrylamide, carboxyl groups- and sulpho groups-containing polymers" ('223 reference, pages 15-17; '304 reference, cols. 8-9).

In response to appellant's arguments in the brief, the examiner points to the disclosure in the Geursen references that "[d]epending on the nature of the substrate and the quantity and nature of the superabsorbent material applied thereto, the swelling values ranges from 50 to 700 or higher, more particularly from 100 to 700 or higher" ('223 reference, page 2, ll. 10-17, and page 6, ll. 9-11; '304 reference, col. 7, ll. 2-6) (answer, page 6).

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Appellant points out in the reply brief that "neither[the Geursen references] nor Arroyo claim that the ARIDALL™ 1125F disclosed in Arroyo can absorb greater than 100 times its weight in water," and that this material is not disclosed in his specification (pages 3-4). Appellant states that "an internet search" did not "find" this material (*id.*, page 3).

On this record, we agree with appellant that the examiner has not identified any evidence in the Geursen references and Arroyo which support the ground of rejection. In order to factually support the ground of rejection, the examiner must establish as a matter of fact that at least one superabsorbent material in the references met the subject claim limitations in the appealed claims. This cannot be accomplished by combining a disclosed general range of absorbent values of superabsorbent materials which overlaps the claimed absorbent range of "greater than about 100 times its weight in water," with a particular superabsorbent material, and especially since there is no disclosure in any of the references or in appellant's specification which would place the particular species within the claimed absorbent range, either expressly or under the principles of inherency. *See Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 780, 227 USPQ 773, 777 (Fed. Cir. 1985) ("[A]nticipation under § 102 can be found only when the reference discloses exactly what is claimed."). Therefore, the examiner has not established a *prima facie* case of anticipation under 35 U.S.C. § 102(b) as a matter of fact and accordingly, we reverse this ground of rejection.

Other Issues

Upon further consideration of the appealed claims by the examiner subsequent to the disposition of this appeal, the examiner should consider whether the Geursen references alone (see, e.g., Geursen '223, page 5, l. 19, to page 6, l. 32, and page 12, l. 18, to page 13, l. 3), or together with appellant's admissions in the specification (page 21, l. 1, to page 23, l. 4), which suggest that superabsorbent materials that absorb greater than about 100 times their weight in water were known, affect the patentability of the claimed invention under 35 U.S.C. § 103(a).

REMAND TO THE EXAMINER

We remand the application to the examiner for consideration and explanation of issues raised by the record. 37 CFR § 1.41.50(a)(1) (2005); Manual of Patent Examining Procedure (MPEP) § 1211 (8th ed., Rev. 2, May 2004; 1200-29 – 1200-30).

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The examiner provisionally rejected appealed claims 43 through 57⁶ under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 72 through 86 of then copending application 08/943,123 (answer, pages 5-60). This application has since matured into United States Patent 6,734,147 ('147 patent), issued May 11, 2004.

Appellant filed a terminal disclaimer along with the reply brief on December 8, 2003, "to overcome the double patenting rejection" (reply brief, page 9). The examiner acknowledged that the terminal disclaimer "is proper and has been entered into the file," but did not state the status of the ground of rejection in view thereof in the communication mailed February 27, 2004.

Accordingly, the examiner is required to take appropriate action consistent with current examining practice and procedure to determine whether the terminal disclaimer overcomes the ground of rejection, and if not, to state the ground of rejection based on the appealed claims vis-à-vis the claims of the '147 patent, setting forth the status of appealed claim 58 in this respect, with a view toward placing this application in condition for decision on appeal with respect to the issues presented.

This remand is made for the purpose of directing the examiner to further consider the ground of rejection. Accordingly, if the examiner submits a supplemental answer to the Board in response to this remand, "appellant must within two months from the date of the supplemental examiner's answer exercise one of" the two options set forth in 37 CFR §1.41.50(a)(2) (2005), "in order to avoid *sua sponte* dismissal of the appeal as to the claims subject to the rejection for which the Board has remanded the proceeding," as provided in this rule.


We hereby remand this application to the examiner, via the Office of a Director of the Technology Center, for appropriate action in view of the above comments.


⁶ The examiner did not include appealed claim 58 in this ground of rejection (answer, page 5; Office action mailed May 24, 2002, page 7; Office action mailed December 18, 2003, page 3), and thus this claim stands unrejected on appeal.

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Reversed

Remanded


CHUNG K. PAK
Administrative Patent Judge


CHARLES F. WARREN
Administrative Patent Judge


PETER F. KRATZ
Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

PH 204276

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**

August 21, 2000

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SERIAL NUMBER: 08/943,125

FILING DATE: October 03, 1997



**By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS**

L. Edele

**L. EDELEN
Certifying Officer**

JAN 10 2007

Application No. 10/614,114
Brief on Appeal
Dated: January 10, 2007

CERTIFICATE OF FACSIMILE TRANSMISSION PURSUANT TO 37 C.F.R. § 1.6 (d)

I hereby certify that this correspondence is being transmitted pursuant to 37 C.F.R. § 1.6(d) by facsimile to The United States Patent and Trademark Office, facsimile telephone number (571) 273-8300 on the date indicated below.

By: /Robert J. Eichelburg, Reg. No. 23,057/
Robert J. Eichelburg

Dated: January 10, 2007